

CLAIMS

1. A method for manufacturing a honeycomb structure, comprising the steps of: preparing a honeycomb formed article comprising a plurality of partition walls using  
5 clay mainly composed of a ceramic material; coating a partition wall strengthening agent to a plurality of partition walls existing in at least one cell opening end portion of the formed article; and thereafter firing the article,

10 wherein a dispersion liquid containing a partition wall strengthening material mixed in a dispersion medium containing an amphipathic liquid compound having both hydrophilic and hydrophobic groups as a main component is used as the partition wall strengthening agent.

15 2. The method for manufacturing the honeycomb structure according to claim 1, wherein the amphipathic liquid compound is a nonionic amphipathic liquid compound.

3. The method for manufacturing the honeycomb structure according to claim 1 or 2, wherein the  
20 amphipathic liquid compound is modified silicone oil into which a hydrophilic organic group has been introduced.

4. The method for manufacturing the honeycomb structure according to claim 3, wherein the modified  
25 silicone oil is at least one type selected from a group consisting of polyether modified silicone oil and hydrophilic special modified silicone oil, or a mixture of them.

5.       The method for manufacturing the honeycomb structure according to any one of claims 1 to 4, wherein the partition wall strengthening material is a cordierite melting point lowering material comprising at least one  
5   type selected from a group consisting of silica, magnesia, talc, and kaolin, or a mixture of them.

6.       The method for manufacturing the honeycomb structure according to any one of claims 1 to 5, wherein the clay mainly composed of the ceramic material contains a  
10   water-soluble organic binder.